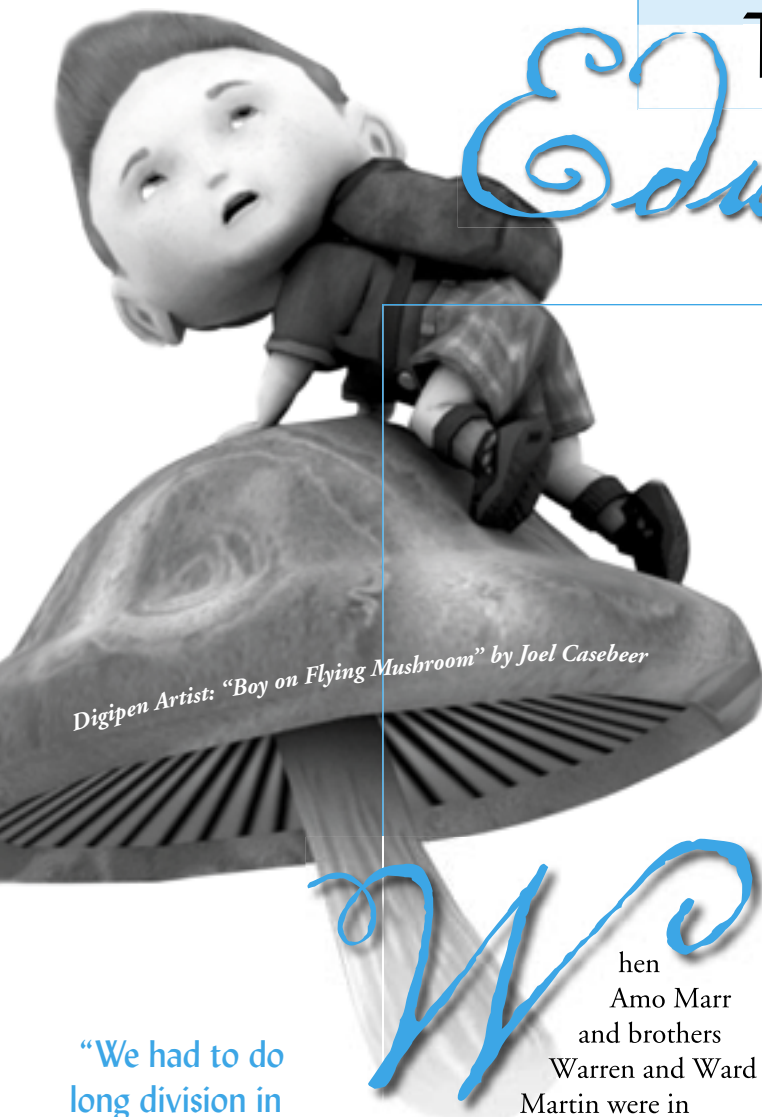


The Changing Face of Education



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When Amo Marr and brothers Warren and Ward Martin were in school at the Redmond Schoolhouse, calculators and computers had not yet been invented. There was no spell check, Internet, or access to spreadsheet programs. The three are now volunteers at the Historical Society in the Old Redmond Schoolhouse Community Center, Room 106, which once housed their first grade classroom. Ward Martin’s eyes twinkle as he reminisces, “We had to do long division in our heads. We had to memorize how to pronounce and spell 100 words. Our teacher could call on us at any time to answer questions about either.”

Amo Marr adds, “The computer didn’t do our writing for us either. We had to learn penmanship. If the ovals in your words went over the line, you could get your fingers rapped with a ruler, so we paid attention.” Warren Martin agrees. “Discipline was strict. But teachers liked what they were doing. They were dedicated. We respected them.” One of Warren’s favorite classes was geography. He says pensively, “It would be hard to teach geography now with the rapid way nations change worldwide.”

In those days, the school was the center of activity for the community; the place where movies and newsreels were shown on Friday nights, along with Christmas and

Thanksgiving pageants or minstrel shows. Warren Martin remembers, “Every kid in the school had the opportunity to participate. The school really was our only social life.” Ward, who played the trumpet in school, formed a dance orchestra with friends and performed on Saturday nights at the Odd Fellows Hall. All three agree when Amo says, “Our school days were happy days.”

Today’s Education

Today’s elementary schools have seen some major changes since Amo, Warren and Ward were in school. Due to new technologies, the way teachers teach and children learn is very

Warren and Amo remembering their school days



different. Students still go to classes, but the range of information accessible to them is almost limitless.

Digital cameras, Internet research and computer presentations allow kids to incorporate significant creativity into their work. Rather than finger painting, kindergartners draw snowmen with the help of a computer program. Students have personal email accounts to communicate with teachers, students and others beyond their immediate community. One area school developed a presentation about Redmond and traded it for a presentation about Montana parks produced by kids in Bozeman, Montana.

One new technology for teachers is United Streaming, which allows teachers to use video clips from the web to enhance learning. "Students may have no idea where Indonesia is in the world," says Redmond Elementary School Principal Stephen Bryant. "United Streaming allows teachers to immediately show students maps and cultural aspects about Indonesia. It's a great tool."

"Technology is changing the way kids think," adds Bryant. "The expectation of what kids need in the classroom has changed. With desktop computers, presentation technology and the Internet, there's

sometimes a 'disconnect' between adults and parents and what kids need to learn in a technological age. Wireless technology will allow students to access information wherever they are in the building. We are on the edge of bringing the world into the classroom with technology."

Cheryl Chikalla, Principal of Audubon Elementary, agrees. "Technology will continue to progress at such a rapid rate that the future will most certainly bring new software," she says. "What's in our imagination today will, within three to five years, become a reality."

Chikalla is particularly excited about one new technology that will soon increase student interaction in the classroom. In the very near future, white boards will enable teachers to type or write information on a screen and drag other illustrations to the main image. The board will act as a huge touch screen. "For example," says Chikalla, "if a picture of the life cycle of a butterfly is on the screen, teachers will be able to access a picture of the larvae stage and drag it over to the image of the butterfly, store it and print it out for students. I think this technology will really change how we teach, and make learning more interactive for kids."

Audubon Elementary teacher Dori West says projectors connected to computers are also very

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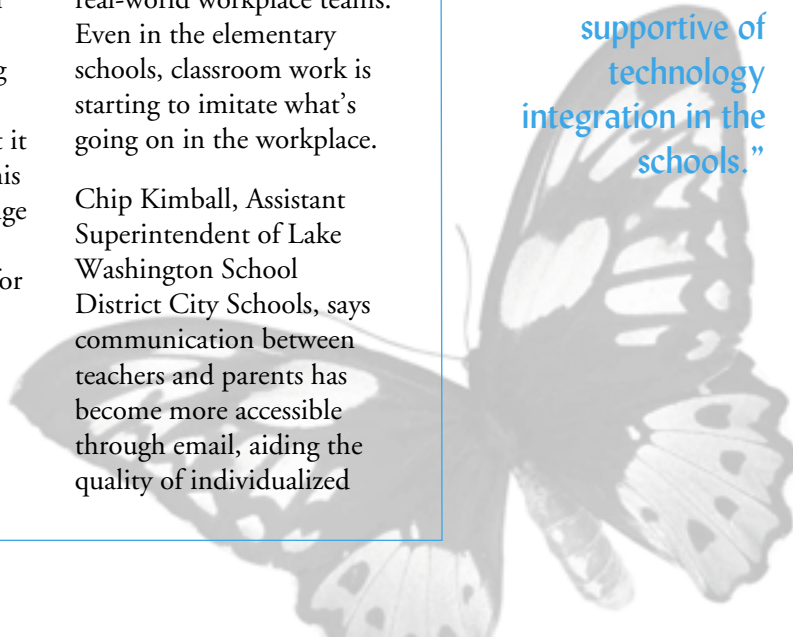


useful in the classroom. The projectors increase West's ability to show a great deal of information to each student individually. In her classroom-write exercises, students take turns using a common keyboard to compose writing that appears on a large screen in front of the class. Everyone can see what the others have written and type their responses directly into the document. Through this process, students learn about editing and revision first-hand.

In many cases, student instruction is modeled after real-world workplace teams. Even in the elementary schools, classroom work is starting to imitate what's going on in the workplace.

Chip Kimball, Assistant Superintendent of Lake Washington School District City Schools, says communication between teachers and parents has become more accessible through email, aiding the quality of individualized

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education. Internet communication, he says, has not only changed education; it has changed how everyone communicates worldwide. “Six years ago when students came to school, the technology available to them was worse than at home,” he says. “Also, teachers were unconvinced technology was a useful educational tool. Today, schools are on par with computer systems kids have at home, and the teacher population is excited and supportive of technology integration in the schools.”

While technology will continue to improve as an educational tool, Kimball does not see a day when all schoolwork will be done by way of email with kids working virtually from home. “Kids are social and need to be interactive,” says Kimball. “It’s equally important that school be a place where students can develop socially. It’s the heartbeat of the community.”

Jack Tobin is another educator who knows just how much the classroom has changed in recent times. Tobin’s first job in Lake Washington School District was as a K-6th grade technology teacher at Audubon and Twain Hart Elementary Schools. In cooperation with Microsoft, which donated 2,000 computers to the schools in 1998, Tobin spearheaded a technology-in-the-schools program designed to educate both students and teachers. Now Principal of Albert Einstein Elementary, Tobin says he has continued to receive support from the community for development of new technologies in the classroom. Computers are now available to students on a four-to-one ratio and Tobin believes the day is coming very soon in which every student will have his or her own computer.

Tools for teachers have also improved. Through a very

sophisticated assessment program, teachers can learn immediately if students need help in a specific area of learning, and then deliver what they need. “This is particularly important,” says Tobin, “because we have a wide range of kids at Einstein—from gifted students to English language learners. With 400 kids coming from such varied backgrounds and different skill levels, it’s very challenging for teachers to know what each kid needs right away and deliver the appropriate individualized instruction. The computer assessment sort allows us to do that.”

Beyond High School

In response to older student needs, DigiPen Corporation and Lake Washington Technical College have both developed programs designed to offer real world technology training in their Redmond classrooms.

DigiPen (www.digipen.edu) was founded in Vancouver, B.C., Canada, in 1988, as an Applied Computer Graphics School specializing in computer simulation and animation. In cooperation with Nintendo of America, the program was designed in response to a need for qualified personnel in video game production. The Redmond based DigiPen Institute of Technology opened in January 1998. Drawing talented students from around the world, the school offers both Associate and Bachelor Degree

programs in Real-Time Interactive Simulation, as well as an Associate of Applied Arts Degree in 3D Computer Animation. Graduates are hired by a host of employers, including Dreamworks Interactive, Microsoft, Nintendo Software Technology and Sony, to name a few.

A fascinating place filled with gadgets, widgets, electronics, computers and techno-artists, the DigiPen classroom brims with creativity. Students hunch over computers, intently drawing would-be dragons and heroes into virtual life. “All the aspects of designing games and movies are tremendously difficult work,” says Senior Vice President of Operations, Raymond Yan. Formerly a designer for Nintendo, Yan knows the level of commitment needed to succeed in the field. “The work,” he says, “requires highly skilled artists and engineers who are aware of a broad range of issues. What we’re training people to do is to tell a machine how to make the water look real. The technology, art and sound also have to work together in a fun way. A million details need to get sorted out in the process.”

DigiPen also works with SeaTac Occupational School, which prepares high school students for DigiPen. Additionally, long distance learning offers access to home school students and students living in remote areas.



At Story Time in the Redmond Library, young children gather around a storyteller who kneels on the floor, artfully capturing little imaginations with pictures and voices. Not a quarter-mile away, men and women step with rhythm and enthusiasm in a line dancing class at the Redmond Senior Center. Spencer Howard, the teacher, can be seen dancing in their midst. "If you don't get the steps, I still allow you to take the class," he offers prospective students. "It's about having fun, and challenging yourself to the level you choose."

Story Time and Senior Center classes barely dip the surface of the learning opportunities in Redmond – there are classes for all ages. The library's Story Time is a big hit among parents and young children. Story themes vary, from traditional selections like "Mother Goose," to stories in other languages for families new to the country. Before beginning, storyteller Ellen Freiwald greets each child cheerfully, and presents a choice of colorful bird-shaped name tags. Her love for children is unmistakable. "It's really precious to see their faces," she says, and, indeed, it is. When she

begins to read, they sit enraptured.

For children and teens with a passion for acting out stories, the professional theatre company SecondStory Rep, offers after-school classes and school-break drama camps. Classes vary from voice lessons to comedy improv and stage combat. Class sizes are generally small to help ensure that each student receives individual attention. On the first day of drama camp, campers are handed a script. Throughout the week, they take ownership of the production as they get ready to present it to an audience.

The Redmond Arts Commission seeks to involve citizens of every age as artists and critics. This October at the Redmond Outdoor Sculpture Exhibit, grab a booklet and learn to navigate to each sculpture using GPS coordinates. Then, ponder the booklet's searching questions about each piece with other learners. Later in the year, watch for Write Out Loud, which provides writing workshops (including a teen slam Haiku workshop) and a chance for participants to share their work with an audience.

As the line dance lesson continues at the Senior Center, classes of all kinds — some open to anyone over eighteen, some limited to "ages 50 and better" — take place down the hall. Friends from Senior Strength class chat in the lounge. They freely share insight about the classes and life in general. One woman notes that classes are a good way to get to know people, and another agrees, "If you're lonely, it's your own fault!" Finally, speaking words of wisdom for students of all ages, a third friend says with eyes sparkling and a smile playing across her lips, "Stop being fearful of getting older, 'cause see what's ahead of you!"

Lake Washington Technical College, also a source for computer technology training (<http://lwtchost.ctc.edu/dept/redmondcampus>), will open its Redmond campus to students this fall. Classes are scheduled to start September 21. The campus is located on the edge of Marymoor Park, and is surrounded by beautifully landscaped grounds that blend masterfully with the local environment.

Designed as a utilitarian college with a strong commitment to area workforce needs, the school intends to take a proactive role in the Redmond community. While long distance learning and online

courses will be available, the college will emphasize classroom learning through real-time, tactile, hands-on education. LWTC President Dr. L. Michael Metke says, "A college like ours is nimble and responsive to community needs. I've always believed this campus will address a strong demand in Redmond and will fill up as soon as it opens. Our mission revolves around finding the community's needs and filling them. Wherever people want to go in life, we hope to offer the skills they need to get started on their way, whether it's for careers in nursing and other health fields, computers and business, or any of the 100 plus different degree and

certification programs we offer. We want to hear their feedback about what they need."

However vast the changes are in the way teachers teach and students learn, from Redmond's easy early days to our vibrant, technologically-savvy future, there are two things on which educators unanimously agree. Schools should be a place for both social and academic interaction, and a good teacher impacts learning more than anything. While technology does enhance learning in the classroom, it can never take the place of direct human interaction. Students need to feel safe, valued and respected. As

Principal Jack Tobin so aptly puts it, "Relationships can't be measured. Sometimes kids just need a hug more than computer instruction."

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